

FOLSOM DAM MODIFICATIONS APPROACH CHANNEL EIS/EIR

**Major Robert Dion
and Cameron Sessions**

Project Managers

Sacramento District, USACE

23 August 2012



**US Army Corps of Engineers
BUILDING STRONG®**

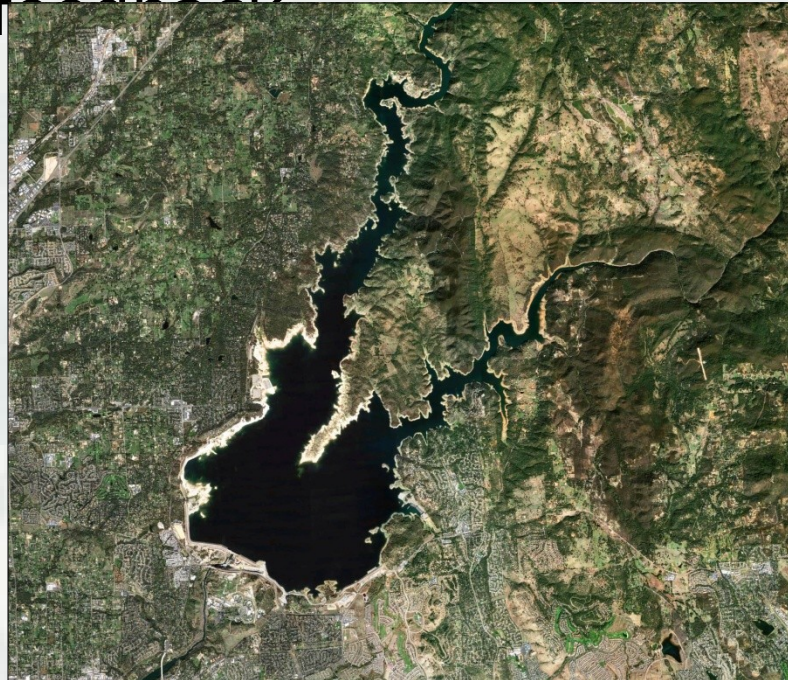


PURPOSE & AGENDA

Purpose: Introduce the Approach Channel phase of the Folsom Dam Auxiliary Spillway Project (Joint Federal Project), explain the environmental assessment process, and acquire community feedback.

Agenda:

- Background
- Project Overview
- Facts and Figures
- Schedule
- Project Phases
- Environmental Policies
- Question/Answers



BACKGROUND

What will the project do?

Folsom Reservoir currently does not have sufficient capacity for advance releases in preparation for a very large flood event.

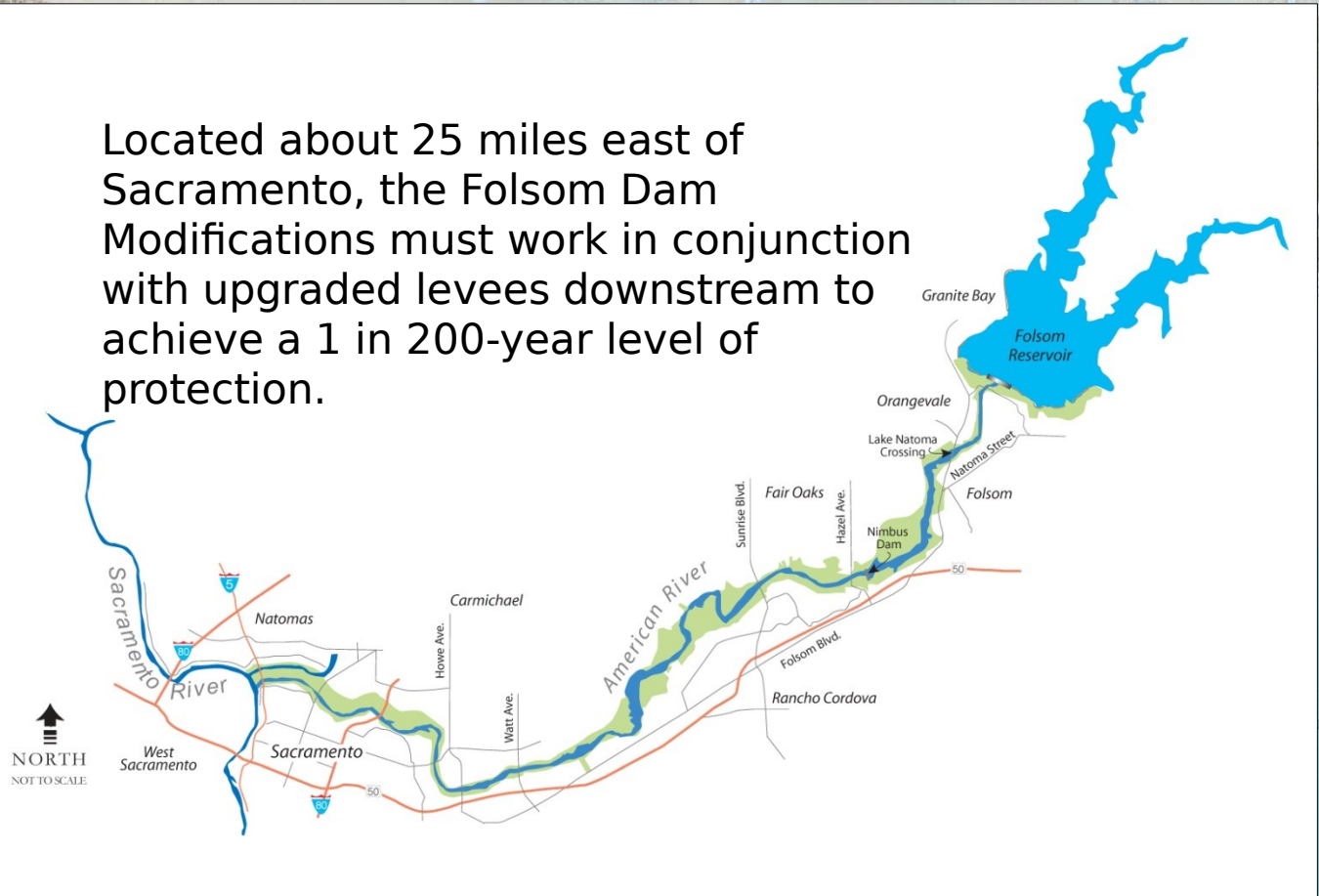


The new auxiliary spillway will manage these large storms by constructing a new spillway with 6 new gates at a lower elevation to allow more water to be safely released earlier in a storm event. Also, additional storage will be available in the reservoir to hold the peak inflows.



BACKGROUND

Located about 25 miles east of Sacramento, the Folsom Dam Modifications must work in conjunction with upgraded levees downstream to achieve a 1 in 200-year level of protection.



FOLSOM DAM MODS OVERVIEW

- The Folsom Dam Auxiliary Spillway Project is a \$962-million cooperative effort between the U.S. Army Corps of Engineers and the U.S. Department of the Interior, Bureau of Reclamation.
- This project will help the Sacramento region achieve a 200-year level of protection, meaning a one-in-200 (.05%) chance for flooding in any given year.
- By working together, the Corps and Reclamation will be able to complete the project faster and more cost effectively than if constructed separately.
- Non-Federal Sponsors:
 - ▶ **Central Valley Flood Protection Board**
 - ▶ **CA Department of Water Resources**
 - ▶ **Sacramento Area Flood Control Agency**



FACTS AND FIGURES

- The new auxiliary spillway will operate in conjunction with the main dam facility and includes:
 - ▶ 1,100 foot approach channel
 - ▶ control structure with six submerged tainter gates
 - ▶ 3,000 foot long spillway chute
 - ▶ stilling basin that acts as an energy dissipater

- The new spillway project will:
 - ▶ Require excavation of more than 3.5 million cubic yards of rock and soil
 - ▶ Placement of 250,000 cubic yards of concrete, and
 - ▶ Incorporate more than 30 million pounds of steel reinforcing



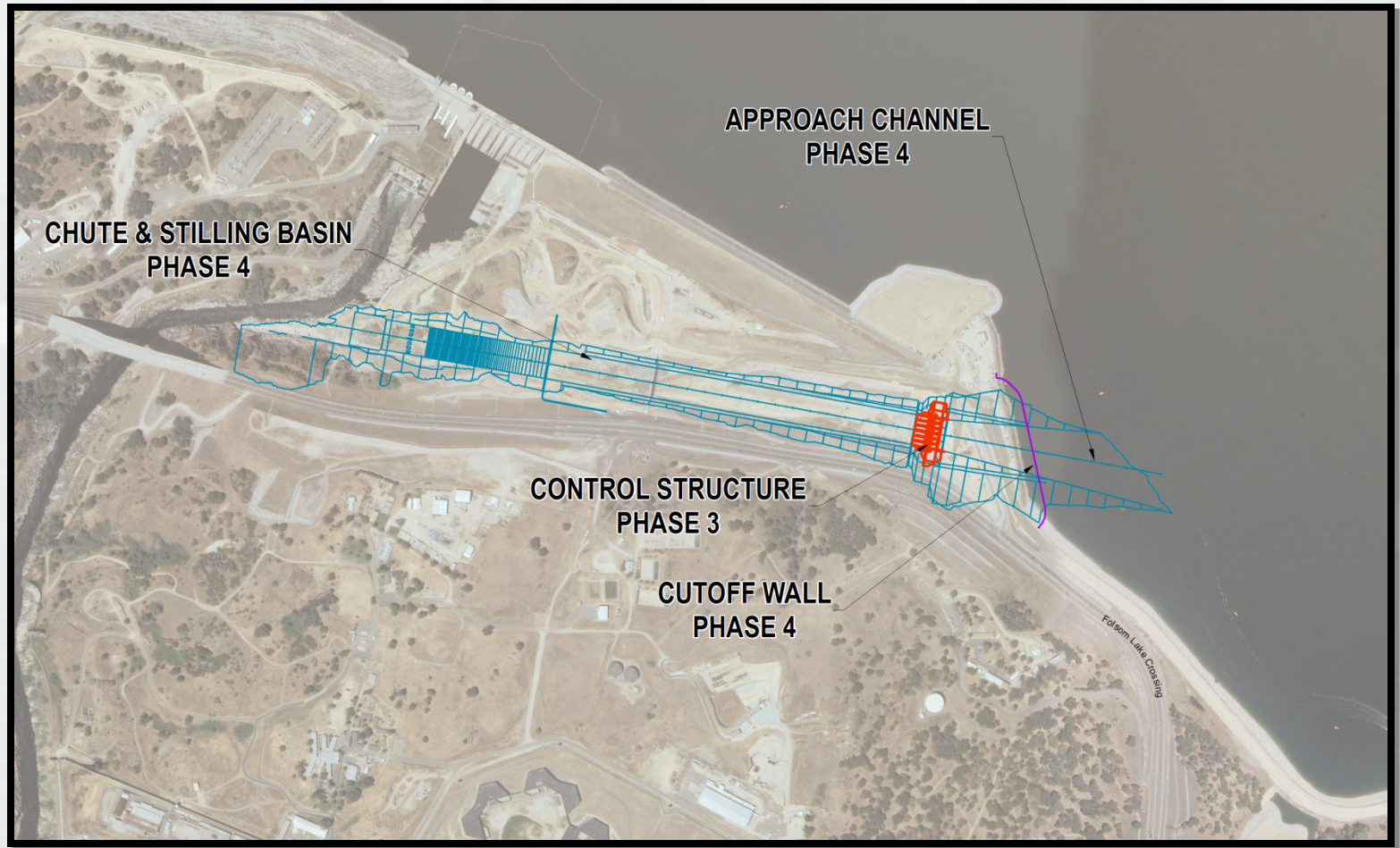
SCHEDULE

The spillway is being constructed in a phased-approach:

- *Phases 1 & 2:* Was completed by the Bureau of Reclamation in January 2011; the first two phases involved a significant amount of excavation at the site
- *Phase 3:* Construction of the control structure that houses the 6 large Tainter gates is currently underway and is expected to last 45 months
- *Phases 4:* Construction of the chute and stilling basin and approach channel.
- *Phase 5:* Restoration of the project site and commissioning.
- **Today's effort will focus on the approach channel construction in Phase 4 and Phase 5.**



Project Phases



APPROACH CHANNEL

- Construction of a 1,100 linear foot inlet channel from Folsom Lake to the control structure
- The channel inlet will include a temporary cut-off wall or cofferdam structure to allow excavation work to occur in dry conditions for the approach channel
- Final design expected Dec 2012
- Project Award May 2013



APPROACH CHANNEL

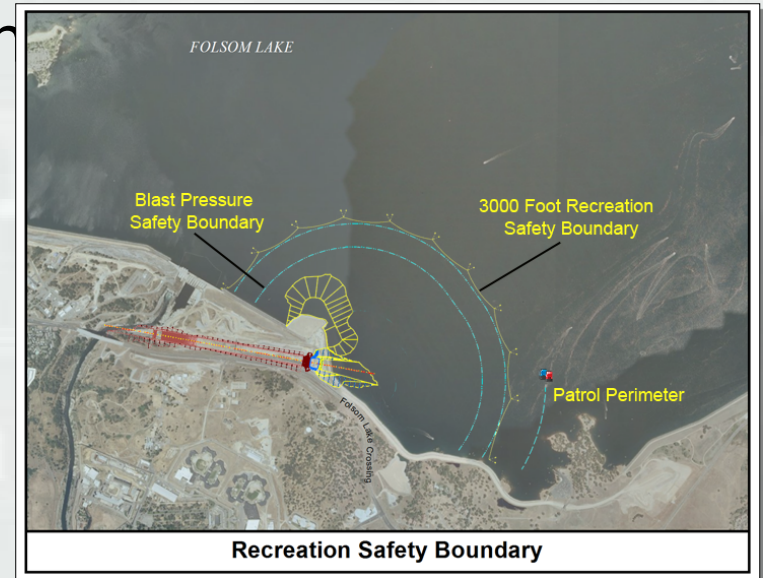
Potential Effects

- In-water Blasting and Dredging
 - ▶ Currently assessing effects (turbidity, etc)
 - ▶ Best Management Practices will be implemented
 - ▶ Silt/turbidity curtains utilized
- Minimize impacts to recreation
- Preferred Alternative Identified
 - ▶ Alternative 2 will use cut-off wall during construction



Test Blasting

- Up to 8 test blasts to be conducted to verify safety boundaries
- Test blasting may last up to a week
- 3000' recreation safety zone
- Patrol unit
- Blast Pressure Safety Boundary – Pressures to be monitored within 2,500' to ensure public safety



Prison Staging Area and Stilling Basin Drain

Additional design refinements are being evaluated within an EA/EIR which includes:

- Use of 10 acres at Folsom State Prison for staging and potential operation of a concrete batch plant,
- Installation of a temporary traffic signal on Folsom Lake Crossing,
- Widening of an existing dirt access road, and
- Construction of a drain at the stilling basin.



National Environmental Policy Act

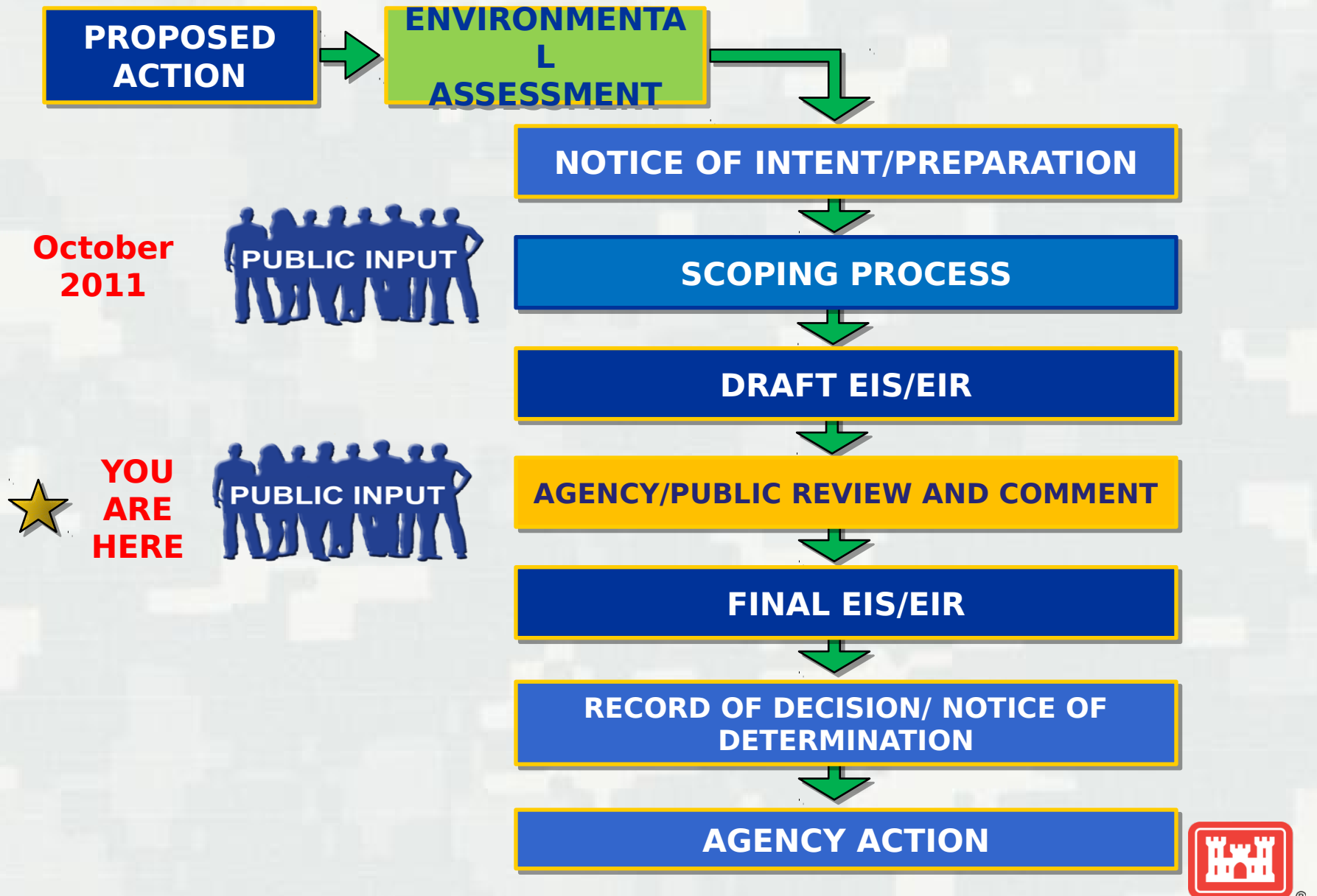
- A process outlined under federal law
- Assesses proposed Federal actions through a range of Alternatives to determine if there is potential significant impact on the environment
- Allows the public an opportunity to be involved with the decision process
- Provides community involvement
 - ▶ Public Scoping Meetings
 - ▶ Public Comment review periods
 - ▶ Public hearings



California Environmental Quality Act

- A process outlined by California state law that:
 - ▶ Informs decision makers and the public about the potential significant environmental effect of a project.
 - ▶ Identifies project changes, alternatives, or mitigation measures to avoid or significantly reduce environmental effects, when feasible.
 - ▶ Discloses to the public, the reasons why a project was approved if significant environmental effects are involved.
- Provides community involvement
 - ▶ Public Scoping Meetings
 - ▶ Public Comment review periods
 - ▶ Public hearings





Public Participation

- A draft supplemental Environmental Impact Statement (EIS)/ Environmental Impact Report (EIR) is currently provided for public comment.
- The approach channel EIS/EIR constitutes a supplemental document to the 2007 EIS/EIR Folsom Dam Safety and Flood Damage Reduction document.
- Opportunities for public input
 - ▶ **Public review of the draft Supplemental EA/EIR: 12 July - 27 August 2012**
 - ▶ **Public review of the draft EIS/EIR: 25 July - 10 September 2012**
 - ▶ **Public review of the final EIS: 31 December 2012 - 29 January 2013**
- You can participate today by submitting written comments to any member of our team.



Q & A Reminders

- The design is not final and effects have not been fully assessed.
- Please provide any written comments to the team. Formal comments may be submitted on the provided comments card and mailed. Comments may also be provided to the website.
- Staff will be here about one hour. Feel free to ask any questions and we'll try to help. If you'd like to depart, we want to thank you for your attendance.
- Now, we'll take some questions to clarify points of the presentation. Please focus questions and discussion on items specific to the Approach Channel phase.

